

Title (en)
SEMICONDUCTOR INTEGRATED CIRCUIT CAPACITOR.

Title (de)
HALBLEITERKONDENSATOR MIT INTEGRIERTER SCHALTUNG.

Title (fr)
CONDENSATEUR A CIRCUIT INTEGRE A SEMI-CONDUCTEUR.

Publication
EP 0110952 A4 19840703 (EN)

Application
EP 83902017 A 19830509

Priority
US 38240382 A 19820526

Abstract (en)
[origin: WO8304343A1] Polyoxide capacitors for semiconductor integrated circuits having oxide dielectric films (18) of 500 Angstroms or less are fabricated using in-situ doped polysilicon layers (17) to have electrical field breakdowns of from 6 to 9 MV/cm. The first polysilicon layer (17) is formed by LPCVD using silane and phosphene at a temperature in the range from about 570 degrees C to 595 degrees C. These capacitors are relatively precisely valued devices used particularly in applications such as filter/codecs. However, they are useful wherever integral capacitors are needed having high dielectric strength polyoxides, including such semiconductor integrated circuit devices as EPROMs and dynamic RAMs.

IPC 1-7
H01L 21/82

IPC 8 full level
H01L 27/04 (2006.01); **H01L 21/02** (2006.01); **H01L 21/20** (2006.01); **H01L 21/822** (2006.01); **H01L 21/8234** (2006.01); **H01L 27/08** (2006.01); **H01L 27/088** (2006.01); **H01L 29/78** (2006.01)

CPC (source: EP US)
H01L 28/40 (2013.01 - EP US)

Citation (search report)
• [A] US 4322881 A 19820406 - ENOMOTO TATSUYA, et al
• [A] JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol. 126, no. 6, June 1979, PRINCETON (US)
• [A] JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol. 129, no. 5, May 1982, MANCHESTER (US)

Cited by
US6413001B1

Designated contracting state (EPC)
BE DE FR NL SE

DOCDB simple family (publication)
GB 2120849 A 19831207; **GB 2120849 B 19860108**; **GB 8314292 D0 19830629**; CA 1199423 A 19860114; DE 3368350 D1 19870122; EP 0110952 A1 19840620; EP 0110952 A4 19840703; EP 0110952 B1 19861210; JP H0673367 B2 19940914; JP S59500893 A 19840517; US 4441249 A 19840410; WO 8304343 A1 19831208

DOCDB simple family (application)
GB 8314292 A 19830524; CA 427894 A 19830511; DE 3368350 T 19830509; EP 83902017 A 19830509; JP 50204383 A 19830509; US 38240382 A 19820526; US 8300696 W 19830509